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(54) SEMICONDUCTOR DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a semiconductor device, whose breakdown voltage and turn-off characteristic can be improved in comparison with conventional semiconductor elements.

SOLUTION: A semiconductor device has a first semiconductor region 1 containing an n-type impurity, a second semiconductor region 3 containing a p-type impurity, and a third semiconductor region interposed between the first and second semiconductor regions 1, 3, where a first semiconductor layer 10 containing an n-type impurity and a second semiconductor layer 11 containing a p-type impurity are arranged alternately in a repeated direction. In the third semiconductor region, the amount of the carriers of the second semiconductor layer 11, which is integrated along the repeated direction, is made larger than the amount of the carriers of the first semiconductor layer 10 which is also integrated along the repeated direction. Further, a fourth

semiconductor region 13 containing an n-type impurity of a low concentration is formed between the first and third semiconductor regions.

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